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**BEFORE THE BOARD OF OIL, GAS AND MINING
DEPARTMENT OF NATURAL RESOURCES
STATE OF UTAH**

**SECRETARY, BOARD OF
OIL, GAS & MINING**

IN THE MATTER OF THE REQUEST FOR AGENCY ACTION OF BILL BARRETT CORPORATION FOR AN ORDER EXTENDING THE BOARD'S ORDERS ENTERED IN CAUSE NOS. 139-8 AND 139-84 TO ESTABLISH SECTIONAL DRILLING UNITS AND AUTHORIZE UP TO FOUR PRODUCING WELLS PER SECTIONAL DRILLING UNIT SO ESTABLISHED OR PREVIOUSLY ESTABLISHED FOR THE PRODUCTION OF OIL, GAS AND ASSOCIATED HYDROCARBONS FROM THE LOWER GREEN RIVER AND WASATCH FORMATIONS UNDERLYING VARIOUS SECTIONS WITHIN TOWNSHIPS 3 AND 4 SOUTH, RANGES 5 AND 7 WEST, USM, DUCHESNE COUNTY, UTAH

REQUEST FOR AGENCY ACTION

Docket No. 2010- 008

Cause No. 139-85

COMES NOW, Bill Barrett Corporation ("BBC"), acting by and through its attorneys, Beatty & Wozniak, P.C., and pursuant to Utah Code Ann. §§40-6-5(3)(b) and 40-6-6, and hereby respectfully requests the Board of Oil, Gas and Mining (the "Board") to enter an order extending the Board's Order: (1) entered in Cause No. 139-8 to establish sectional (640-acre or substantial equivalent) drilling units for the production of oil, gas and associated hydrocarbons from the Lower Green River and Wasatch formations, defined in said Order as follows:

the interval from the top of the Lower Green River formation (TGR₃ marker) to the base of the Green River-Wasatch formations (top of Cretaceous), which base is defined as the stratigraphic equivalent of the Dual Induction Log depths of 16,720 feet in the Shell-Ute 1-18B5 well located in the S½NE¼ of Section 18, Township 2 South, Range 5 West,

U.S.M., and 16,970 feet in the Shell–Brotherson 1-11B4 well located in the S½NE¼ of Section 11, Township 2 South, Range 4 West, U.S.M.,

for the following lands:

Township 4 South, Range 5 West, USM

Sections 7-18 inclusive

Township 4 South, Range 7 West, USM

Sections 1-5 inclusive

Sections 8-16 inclusive

(the “139-8 Extension Lands”); and (2) entered in Cause No. 139-84 to allow for up to four (4) producing wells per sectional drilling unit for the production of oil, gas and associated hydrocarbons from the Lower Green River and Wasatch formations not only to the 139-8 Extension Lands, but also to the following lands for which sectional drilling units have already been established by the Board:

Township 3 South, Range 5 West, USM

Sections 13-15 inclusive

Sections 22-27 inclusive

Sections 34-36 inclusive

Township 4 South, Range 5 West, USM

Sections 2-6 inclusive

Township 3 South, Range 7 West, USM

Sections 2-11 inclusive

Sections 14-23 inclusive

Sections 26-29 inclusive
Sections 32-35 inclusive

(the “Existing Spaced Lands”), as said formations are defined in the respective existing spacing orders applicable to said lands (Cause Nos. 140-6 (no specific definition provided) and 139-8 (*see above*)). The 139-8 Extension Lands and the Existing Spaced Lands are collectively hereinafter referred to as the “Subject Lands” and comprise the remaining lands within what BBC has designated its “Blacktail Ridge Area” not already subject to the Board’s Order in Cause No. 139-84.

In support of this Request, BBC respectfully states and represents:

1. BBC is a Delaware corporation with its principal place of business in Denver, Colorado. BBC is duly qualified to conduct business in the State of Utah, and is fully and appropriately bonded with all relevant Federal, Indian and State of Utah agencies.

2. The mineral estate underlying the Subject Lands is primarily Indian, with scattered State of Utah and fee (privately) owned parcels. The Lower Green River and Wasatch formation oil, gas and associated hydrocarbons are in large part under lease to, or subject to an exploration and development agreement with, BBC.

3. By Order entered on August 11, 1971 in Cause No. 140-6 (the “140-6 Order”), the Board established 640-acre drilling units for the production of oil, gas and

associated hydrocarbons from the Lower Green River and Wasatch formations (no definition set forth) for the following portions of the Subject Lands:

Township 3 South, Range 7 West, USM

Sections 2-11, 14-23, 26-29 and 32-35,

among other lands. Under the original 140-6 Order, only one well may produce on each such unit so established, which must be located in the center of the SW $\frac{1}{4}$ NE $\frac{1}{4}$ with a tolerance of 660 feet in any direction; provided that an exception to said tolerance may be granted without a hearing where a topographical exception is deemed necessary.

4. By Order entered on September 20, 1972 in Cause No. 139-8 (the "139-8 Order"), the Board established 640-acre drilling units for the production of oil, gas and associated hydrocarbons from the Lower Green River-Wasatch formations, defined as:

the interval from the top of the Lower Green River formation (TGR₃ marker) to the base of the Green River-Wasatch formations (top of Cretaceous), which base is defined as the stratigraphic equivalent of the Dual Induction Log depths of 16,720 feet in the Shell-Ute 1-18B5 well located in the S $\frac{1}{2}$ NE $\frac{1}{4}$ of Section 18, Township 2 South, Range 5 West, U.S.M., and 16,970 feet in the Shell-Brotherson 1-11B4 well located in the S $\frac{1}{2}$ NE $\frac{1}{4}$ of Section 11, Township 2 South, Range 4 West, U.S.M.,

for the following portions of the Subject Lands:

Township 3 South, Range 5 West, USM

Sections 13-15, 22-27 and 34-36

Township 4 South, Range 5 West, USM

Sections 2-6,

among other lands. Under the original 139-8 Order, only one well may produce on each such unit so established, which must be located in the center of the NE¼ with a tolerance of 660 feet in any direction; provided that an exception to said tolerance may be granted administratively without a hearing where a topographical exception is deemed needed.

5. By Order entered on April 17, 1985 in Cause No. 139-42 (the “139-42 Order”), the Board modified the 139-8 and 140-6 Orders, among other orders, to provide that additional Lower Green River-Wasatch wells may be drilled, completed, and produced on the established drilling units to a density of no greater than two producing wells in each unit comprising a section. Additional wells may be drilled at the option of the operator of the unit based upon geologic and engineering data for that unit which will justify an additional well in order to recover oil, provided that said operator would have a reasonable opportunity to recover costs of drilling, completing, producing and operating a well plus a reasonable profit. Any additional well must be located at least 1,320 feet from an existing well in the unit and not closer than 660 feet from the exterior boundary of the unit, and no two wells may be drilled in the same quarter section.

6. By Orders entered on June 18, 2007 in Cause No. 139-77 (the “139-77 Order”) and on May 2, 2008 in Cause No. 139-83 (the “139-83 Order”), the Board further modified the 140-6 and 139-8 Orders as relevant to the Existing Spaced Lands to provide

that the second authorized well for each unit could be located anywhere within the unit boundaries; provided that, if the well were to be located closer than 660 feet to a unit boundary or closer than 1,320 feet from a well producing from the same formations, an exception location approval in accordance with Utah Admin. Code Rule R649-3-3 would be required.

7. By Order entered December 31, 2008 in Cause No. 139-84 (the "139-84 Order"), the Board modified the 140-6, 139-8, 139-42, 139-77 and 139-83 Orders, among many other orders applicable to the Altamont/Bluebell/Cedar Rim - Sink Draw fields, but only as relating to lands other than the Existing Spaced Lands, to allow up to four (4) producing Lower Green River-Wasatch wells upon each drilling unit established under said orders, to be drilled at the option of the operator and with the operator's full discretion as to the development of the hydrocarbon resources; provided that each additional well shall be no closer than 1,320 feet from an existing unit well completed in and producing from the formations and no closer than 660 feet from the drilling unit boundary.

8. The 139-8 Extension Lands are not currently subject to any order of the Board establishing drilling units for Lower Green River and Wasatch formation production. Instead, they are currently only subject to the Board's and Division's general rules, including the general well siting rule (Utah Admin. Code Rule R649-3-2).

9. BBC believes and therefore avers that the geologic and reservoir characteristics of the Lower Green River-Wasatch formations underlying the 139-8 Extension Lands are similar to those of the Existing Spaced Lands and the other adjacent lands subject to the 139-8 Order, as modified, and therefore constitute a “common source of supply” as that phrase is defined in Utah Code Ann. §40-6-2(18). Extension of the 139-8 Order to establish consistent and conforming sectional drilling units for the 139-8 Extension Lands is therefore appropriate.

10. As relating to the Lower Green River and Wasatch formations, the Board, in the 139-84 Order, expressly found:

- a) [P]roduction occurs from multiple, generally low-matrix porosity, thin-bedded sandstones, forming a highly complex series of isolated and discontinuous beds that are randomly distributed vertically over a several thousand-foot interval. Normally, the productive beds are separate and distinct and not in communication with each other [Findings of Fact No. 15];
- b) [M]any of the productive beds are not correlatable from well to well and will not afford communication between wells within several hundred feet of one another [Findings of Fact No. 16];
- c) [E]vidence from mudweights, pressure data, well logs, and production data show virgin and near virgin zones exist and reserves that otherwise would not be produced will be recovered by the drilling, completion and production of third and fourth wells [Findings of Fact No. 21]; and
- d) The drilling of increased density wells under existing orders within [the area subject to the 139-84 Order] demonstrates:

- Second wells have recovered in excess of 55 MMBOE of incremental oil to date;
- Second and third wells drilled discovered incremental oil in new reservoirs not intersected by earlier wells;
- Second and third wells do not drain the reserves in the drilling units and are nearing the end of their economic lives;
- The average well drainage area [for the area subject to the 139-84 Order] is approximately 160 acres;
- Some of the reservoirs intersected by second and third wells do communicate with the earlier wells drilled, but also encountered incremental reserves (new reservoirs) that have not been previously encountered and produced;
- Despite some pressure communication between increased density wells with first and subsequent wells in [*sic*, a] section, there is not overall production interference or production acceleration between wells; and
- Production from second, third, and even fourth wells in section did not adversely affect production in the first and other pre-existing wells producing from the [Lower Green River and Wasatch formations] in the drilling units.

[Findings of Fact No. 22].

In addition, the Board expressly made the following conclusions of law:

- a) The 640-acre drilling units shall remain a uniform size and shape... and conform to the predominant pattern in the area established by the [139-42 Order]... [Conclusion of Law No. 5]; and
- b) An order authorizing the drilling of additional wells, up to four wells in the established drilling units at the option of the operator,... will promote the public interest, economically increase ultimate

- b) An order authorizing the drilling of additional wells, up to four wells in the established drilling units at the option of the operator,... will promote the public interest, economically increase ultimate maximum recovery, prevent waste, protect correlative rights of all owners, and avoid the drilling of unnecessary wells [Conclusion of Law No. 7].

11. Similar to the testimony given and exhibits admitted into evidence at the hearing in Cause No. 139-84, and the Findings of Fact and Conclusions of Law of the Board cited in Paragraph 10 above, BBC believes and therefore avers that, as relevant to the Lower Green River and Wasatch formations underlying the Subject Lands:

- a) Geologic and engineering information from the initial wells drilled demonstrate that the recoverable oil and gas will not be effectively drained in a 640-acre drilling unit by one (1) or two (2) wells and an addition of up to four (4) wells per section will tap into smaller productive reservoirs that have geologic and engineering characteristics that prevent one or two wells from draining those resources;
- b) Many of the productive reservoirs that are drilled do not correlate well from well to well. This geologic characteristic prevents communication between wells at intervals as small as less than 1,000 feet;
- c) The reservoir permeability and nature of the fracture components of the reservoir reduces the effect of communication with the sand that do correlate and does not allow for efficient drainage of the hydrocarbon resource;
- d) Production data and geologic calculations demonstrate that one or two wells per section do not effectively drain the reservoir and recoverable hydrocarbons can be recovered with up to four wells per section;

offsetting wells demonstrating the potential for additional recovery of hydrocarbons in a section;

- f) Separate and distinct reservoirs will be found with additional wells drilled in the field and hydrocarbons recovered from new wells can not be recovered with the existing wells in the field;
- g) The current order and rules applicable to the Subject Lands allow for operators to shut in and plug existing wells in the field with potential resources that may not be recovered in order to drill new wells that have higher potential. Waiting for the existing wells to deplete causes economic waste and higher operating expenses which will reduce the ultimate recovery of the hydrocarbons. Surface facilities deteriorate, gas gathering systems are under utilized and run less efficiently, and overall production operating expenses are higher reducing the effective productive life of the field and reduces ultimate recovery; and
- h) In some areas of the field based on geologic, engineering and economic factors additional drilling with up to four wells per section will not cause unnecessary wells to be drilled and will allow additional hydrocarbons to be produced that would otherwise not be recovered.

Accordingly, extension of the 139-84 Order to the Existing Spaced Lands and, presuming the request to establish sectional drilling units relating thereto is granted, the 139-8 Extension Lands is fair, equitable and justified.

12. BBC believes and therefore alleges that granting its Request will be in furtherance of the public policies of this State to promote greater recovery of oil, gas and associated hydrocarbons from the Lower Green River and Wasatch formations without waste and with protection of the correlative rights of all affected owners, constitutes orderly and consistent development of the Subject Lands, and is just and reasonable.

13. BBC will, in accordance with Board rules, timely submit exhibits and present testimony in support of these allegations.

14. BBC will separately file a certificate of mailing listing all parties known to it, based on a search of the respective State of Utah, Bureau of Indian Affairs and County realty records and the records of the Division, whose "legally protected interests" will be affected by this Request. There are no respondents or adverse parties known at this time to BBC.

WHEREFORE, BBC respectfully requests:

1. That this matter be set for hearing on February 24, 2010;
2. That notice of such hearing be given as provided by law; and
3. That, upon sufficient evidence produced and testimony given at the hearing,

the Board issue an order:

a) Extending application of the 139-8 Order to effectively establish sectional (640-acre or substantial equivalent) drilling units for the production of oil, gas and hydrocarbons from the Lower Green River and Wasatch formations, as defined in said Order, for the 139-8 Extension Lands described above;

b) Extending application of the 139-84 Order to all of the Subject Lands to allow up to four (4) producing Lower Green River-Wasatch wells upon the drilling units so established for the 139-8 Extension Lands, as well as the existing drilling units for the Existing Spaced Lands, subject to the same off-set limitations set forth in said Order;

c) Making such findings and orders in connection with this Request as it deems necessary; and

d) Providing for such other and further relief as may be just and equitable under the circumstances.

Respectfully submitted this 7th day of January, 2010.

BEATTY & WOZNIAK, P.C.

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